JCS/DoD SE Roles & Responsibilities Description

- Who is in charge of the capability architecture?

- Who is the user?

- There is no taxonomy, no data elements

- Roadmaps are incomplete to effectively derive acquisition requirements

JCS/DoD SE Roles & Responsibilities
Impact

- Define what are the joint dependencies
- Help PMs and SEs know where program boundaries are, therefore helps with program scope and requirements definition.
- Allows translation of joint capabilities into operational requirements
- Individual Services would morph into a common process

JCS/DoD SE Roles & Responsibilities
Solutions

- Use SE process as the enabler
- Define a clear decision process to implement the results of the JCS FCB
  - Requires Joint Capability Area Review w/ AT&L, FCB, functional experts from Services
  - AT&L/NII perform systems analysis/ architecture definition/cost estimate
  - Capability Mgr established at AT&L/NII to lead PPBE interaction
  - Services execute product development

JCS/DoD SE Roles & Responsibilities
Solution (cont.)

Org	Activity	Players	Changes
JCS	Capability Identification	FCB	
AT&L/NII	Jt Capab Area Rvw to clarify/ buy in	FCB AT&L/NII Services	SE Process
AT&L/NII	Analysis/Arch Def/Cost Est (SE Process)	AT&L/NII (lead) JCS Services	SE Process, Arch Definition, Cost Est
Capab Mgr (new)	Integration based on analysis/arch	AT&L/NII Services	$$, Legislative
Services	Product Dev	Services	DoD Funding??

JCS/DoD SE Roles & Responsibilities
Barriers

- Experience in "capability discipline" to execute SE
  - Specialty engineering disciplines not well defined for capability
  - Type of trade studies to perform
- JCS too focused on near term
- Platform centric environment
- Clarity of SE – capabilities definition
- Existing management structure – AT&L/JCS
- Very little experience with SE at capability level
- Industrial base creativity & Service flexibility

JCS/DoD SE Roles & Responsibilities
Good/Best Practices

- Investigating issues - Donna Rhodes, SE Dept MIT

- Use DAG Best Practices (program level but could be applicable)

- SE Best Practices documented in Product Centers – solicit and use

- Use MDA – experience base with BMDS "SoS"

JCS/DoD SE Roles & Responsibilities
Short Term Actions/Who?

- Formally identify who is in charge
- Formally identify who is the user
- Align AT&L and NII for Sys-of-Sys management

JCS/DoD SE Roles & Responsibilities
Long Term Actions/Who?

- Prepare Roadmap as an IMP/IMS
- Establish SE IPT in JCS; composed of experienced Service Sys Engs
- Start with a pilot on a real problem
- Create a SEP for this process
- Establish taxonomy and lexicon